

## Data-Based Decision Making: Selecting Interventions to Improve Student Outcomes

Arizona's 10<sup>th</sup> Annual Transition Conference  
Scottsdale, AZ  
September 20 – 22, 2010



## Purpose of IDEA

To ensure that all children with disabilities have available to them a free appropriate public education that emphasizes special education and related services designed to meet their unique needs and **prepare them for further education, employment,** and independent living

IDEA Regulations §300.1(a)

## National Longitudinal Transition Study 2:

Youth with disabilities ages 17 – 21 in 2005,  
out of school 1 mo – 4 yrs

### Postsecondary Education

- **78%** those with an VI attended PSE
- **72%** those with an HI attended PSE
- **45%** enrolled at anytime (53% general population)
- **32%** 2-yr colleges
- **14%** 4-yr colleges
- **29%** had completed program

### Employment

- **57%** working at interview (66% general population)
- **19%** had informed employer of disability
- **3%** received accommodation on the job
- **53%** had quit their last job
- **66%** those with a cognitive disability (MR) participating in PSE, work, or job training

Newman, L., Wagner, M., Cametto, R., & Knokey, A.-M. (2009). The Post-High School Outcomes of Youth with Disabilities up to 4 Years after High School: A Report of Findings from the National Longitudinal Transition Study-2

## National Longitudinal Transition Study 2:

Youth with disabilities ages 17 – 21 in 2005,  
out of school 1 mo – 4 yrs

- **White** youth more likely to have been employed than their African American peers (80% v. 47%)
- **Males** more likely to work full-time than females (68% v. 35%)
- High school **completers** 3x more likely to have enrolled in PSE than noncompleters (51% v. 17%)
- **Noncompleters** more likely to be involved in criminal justice system



Newman, L., Wagner, M., Cametto, R., & Knokey, A.-M. (2009). The Post-High School Outcomes of Youth with Disabilities up to 4 Years after High School: A Report of Findings from the National Longitudinal Transition Study-2

## Do you know your local outcomes?

- Graduation rate?
- Dropout rate?
- Employment rate?
- Enrollment rate?
- How many females are full time?
- How many students in the 18-22 year old program are working 1 year out of high school?
- How many students enrolled in post-secondary completed a term?



## Indicators 1 & 2

- **#1** Percent of youth with IEPs graduating from high school with a regular diploma.
- **#2** Percent of youth with IEPs dropping out of high school. (20 U.S.C. 1416 (a)(3)(A))



### Indicator 13

- Percent of youth with IEPs aged 16 and above with an IEP that includes appropriate measurable postsecondary goals that are annually updated and based upon an age appropriate transition assessment, transition services, including courses of study, that will reasonably enable the student to meet those postsecondary goals, and annual IEP goals related to the student's transition services needs.
- There also must be evidence that the student was invited to the IEP Team meeting where transition services are to be discussed and evidence that, if appropriate, a representative of any participating agency was invited to the IEP Team meeting with the prior consent of the parent or student who has reached the age of majority. (20 U.S.C. 1416(a)(3)(B))

### Indicator 14

Percent of youth who are no longer in secondary school, had IEPs in effect at the time they left school, and were:

**A.** Enrolled in **higher education** within one year of leaving high school.

**B.** Enrolled in **higher education or competitively employed** within one year of leaving high school.

**C.** Enrolled **higher education or in some other postsecondary education or training; or competitively employed or in some other employment** within one year of leaving high school.

### Critical Relationship

Effective Secondary  
Transition Education &  
Services/  
Quality IEPs  
(Indicator 13)



Staying in School,  
Not dropping out  
(Indicator 2)

Positive post-school  
outcomes  
(Indicator 14)

Graduating  
(Indicator 1)



### Inputs

Qualified Staff?  
  
Policies?  
  
Leadership?  
  
Professional  
Development?

### Outputs

Use of Evidence-  
Based Practices?  
  
Participation and  
Success in General  
Curriculum?  
  
Interagency  
Agreements?  
  
Increased Family  
Involvement?

### Outcomes

What student  
outcomes do  
we need to  
improve?  
  
Graduation?  
Employment?  
Enrollment?

### Challenges

- Engaging students within context of secondary education
- Delivering educational opportunities that keep youth in school and prepare them for adulthood
- Getting the right interventions to the right students at the right time with the required intensity

### How do we do improve outcomes?

- Federal Mandates
- Research
- Professional literature
- Looking at data



## Drilling into the district's engagement rate

Looking at the percent of youth engaged in the post-school activities by the following categories:



- Females v. Males
- Graduates v. Dropouts
- Various Races/Ethnicities
- Disability Categories
- What other groups do you want to look at?

NPSO Data Use Toolkit v.1

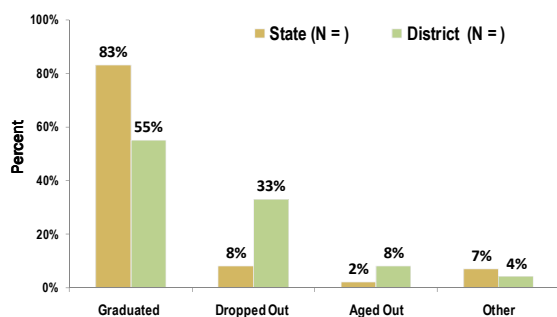
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## Performance & Behavioral Data

	English	Algebra 1	Algebra 2	Geo	Chem	Physics	Civics	US History
School	42	35	43	47	53	57	36	53
District	61	42	50	51	61	80	59	61
State	73	67	72	73	77	85	71	77

	Attendance	Disciplinary Actions (2+)	8-13 % Compliance	Grad	Dropout
School	81%	38%	79	51	43
District	94%	20%	87	55	33
State	95%	12%	91	83	8

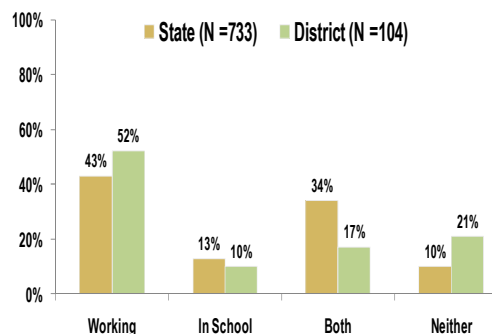
## State & District Results by Method of Exit



Data Source: Sample PSY SY 200x-0x

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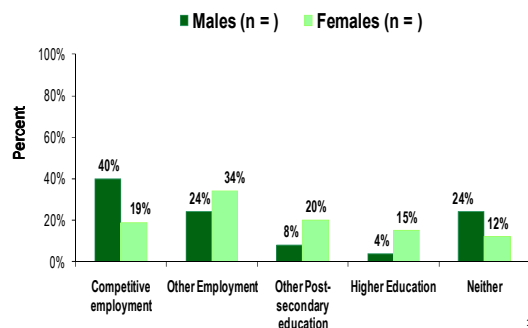
## State & District Engagement Rates



Data Source: 2008/ 2009

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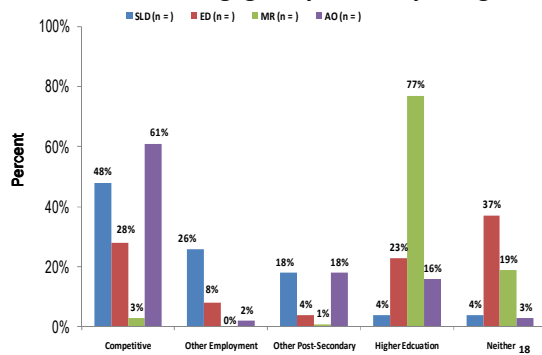
## Percent of Males & Females Engaged



Data Source: Sample (SY 200x-0x)

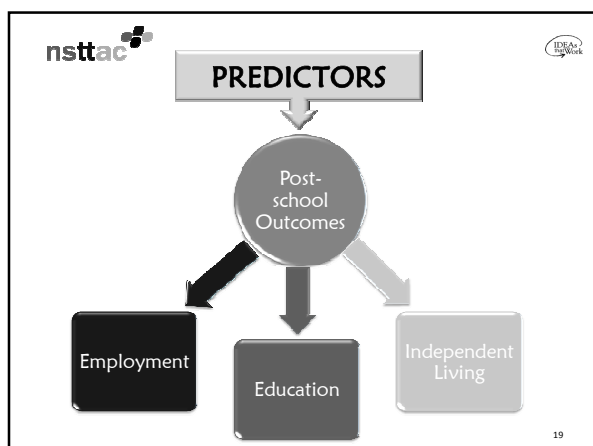
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## Percent of Youth Engaged by Disability Categories



Data Source: Sample (SY 200x-0x)

AO = All Other Disabilities



Predictors/Outcomes	Education	Employment	Independent Living
•Career Awareness	X	X	
•Occupational Courses	X	X	
•Paid Employment/Work Experience	X	X	X
•Vocational Education	X	X	
•Work Study		X	
•Community Experiences		X	
•Exit Exam Requirements/High School Diploma Status		X	
•Inclusion in General Education	X	X	X
•Program of Study		X	

Predictors/Outcomes	Education	Employment	Independent Living
•Self-Advocacy/Self-Determination	X	X	
•Self-Care/Independent Living	X	X	X
•Social Skills	X	X	
•Interagency Collaboration	X	X	
•Parental Involvement		X	
•Student Support	X	X	X
•Transition Program	X	X	

## What are we talking about?

- Terms are not at all consistent.
- All combinations have been used:

A	B	C
Evidence	Based	Practice(s)
Research	Validated	Treatment
Scientifically		Program
Empirically	Supported	Intervention

- As a speaker and listener, remember:
  - Usage is NOT CONSISTENT across the field of education
- We cannot assume anything from the term alone
- **We must attend to the procedures, not the label**

(Detrich, Spencer, & Slocum, 2009)

## Broad Definitions

(Hetsel, Hitchcock, Miller, Malinow, & Murray, 2006; Twyman, 2008)

### Evidence-Based Practices

- Are based on rigorous research designs
- Have demonstrated a record of success for improving student outcomes
- Have undergone systematic review process using quality indicators to evaluate level of evidence

### Research-Based Practices

- Are based on rigorous research designs
- Have demonstrated a record of success for improving student outcomes

### Promising Practices

- Are based on research
- Have demonstrated limited success
- Have used a 'weak' research design

### Unestablished Practices

- Are not based on research
- Have no data to support effectiveness
- Based on anecdotal evidence and/or professional judgment

## What might you be using when...

You read an interesting study on teaching grocery shopping in *Exceptional Children* and consider trying in your classroom?

You read about a way to teaching grocery shopping in *TEACHING Exceptional Children* and decide to try it out?

You hear about a neat teacher-made curriculum for teaching grocery shopping at a workshop and consider using it in your classroom?

You read a review of the literature on teaching grocery shopping skills that rates the quality of studies and consider it for your classroom?

## Choosing Secondary Transition Interventions

Interventions to improve post-school outcomes

- Predictors of post-school success

Interventions to increase student transition skills

- Evidenced-based practices

– [www.nsttac.org](http://www.nsttac.org)

Interventions for academic skills for secondary SWD

– [www.psoecenter.org](http://www.psoecenter.org)

Diagnostic, targeted and school-wide dropout prevention strategies

– [www.ndpc-sd.org](http://www.ndpc-sd.org)



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## General Practices Related to Dropout Prevention

- Comprehensive diagnostic systems
- Early warning systems
- Provide personalized instruction and learning
- Provide rigorous and relevant instruction
- Provide academic support
- Instruction on behavior and social skills
- Supportive school climate

### Effective Interventions in Dropout Prevention

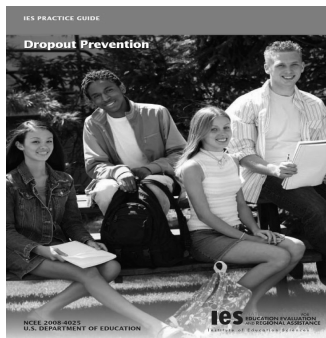
**Diagnostic processes** for identifying student-level and school wide dropout problems (Rec. 1)

**Targeted interventions** for a subset of middle and high school students who are identified as at risk of dropping out (Recs. 2, 3, & 4)

**School wide reforms** designed to enhance engagement (Recs. 5 & 6)

#### What Else Matters:

Policies  
Parental Involvement  
Professional Development



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## Interventions That Work



### Diagnostic

- Comprehensive systems
- Unique IDs
- Early Warning Systems



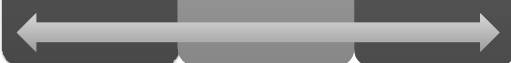
### Targeted

- Adult advocates
- Academic support
- Classroom behavior and social skills



### School wide

- Personalized learning and instruction
- Rigorous and relevant instruction
- Attendance



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## Diagnostics

# Data Matter

...a lot!

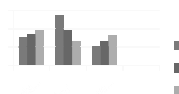


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## Diagnostics

- Develop comprehensive data systems that support a realistic diagnosis of the number of students who drop out
- Use data to help identify individual students at high risk of dropping out.
- Collect accurate information on withdrawals



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## Establish Early Warning Systems

- Use data to identify incoming students with histories of academic (retentions), attendance, and behavior problems
- Review student level data to identify students at risk of dropping out.
- Monitor students sense of engagement and belonging in school.

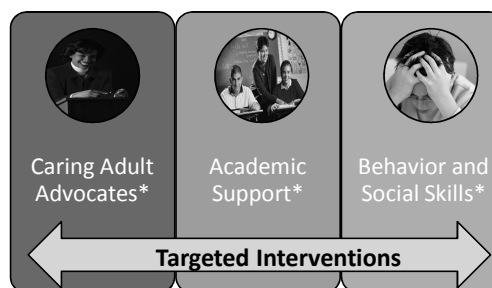


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## Interventions Matter

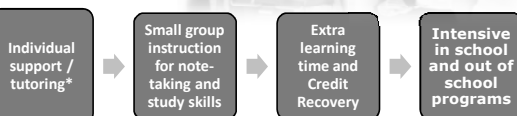


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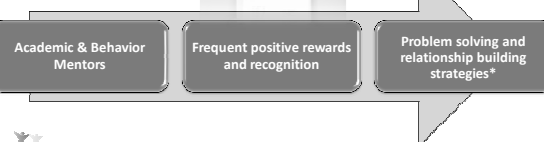
## Provide Academic support\* and enrichment



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## Implement programs to improve classroom behavior and social skills

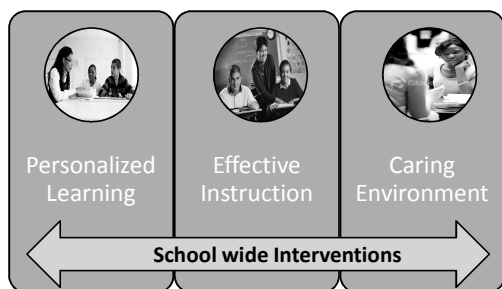


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## Interventions Matter



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## Personalize the learning environment and instructional process.



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## Supportive School Climate



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## Provide rigorous and relevant instruction



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## How does this apply?

- Provides practitioners information about secondary transition program characteristics that have been empirically linked to improved post-school success for students with disabilities
- Can be used to:
  - develop and expand programs
  - evaluate existing programs
- Can help IEP teams design annual IEP goals and transition services that are more likely to help students achieve their stated post-school goals

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## Questions to Consider at the Program Level

- How does your graduation rate compare to your state's graduation rate?
- Considering the overall graduation and dropout rates for youth with disabilities from your school/district, what surprised you?
- What district-wide policies and or procedures contribute to students with disabilities graduating from or dropping out of high school?
- What are barriers to graduating or dropping out?

## More Questions to Consider at the Program Level

- Where career technical education courses are available, are youth with disabilities enrolling in these classes? Are youth with disabilities successfully completing?
- How does your district support paid work opportunities for youth with disabilities while they are in high school

## More Questions to Consider at the Program Level

- How are students with and without disabilities exiting secondary programs?
- What instruction/ program is in place to engage students in planning for their method of exit?

## Moving from District to Classroom

- Evidence-based practices for instruction
- Resources for the “people that do the work”

## What NSTTAC's Done

- Reviewed experimental research to identify evidence-based practices in secondary transition
- Identified 33 evidence-based practices
- Developed 82 Research to Practice Lesson Plan Starters

Taxonomy Category	Evidence-Based Practices	Research to Practice Lesson Plan Starters
Student Focused Planning	3	8
Student Development	26	90
Family Involvement	1	0
Program Structure	3	8

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## Practice Descriptions

- What is the evidence base?
- With whom was it implemented?
- What is the practice?
- How has it been implemented?
- Where has it been implemented?
- How does this practice relate to Indicator 13?
- How does this practice relate to National Standards?
- Where is the best place to find out how to do this practice?
- Full references

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## Research to Practice Lesson Plan Starters

- Objective
- Setting/Materials
- Content Taught
- Teaching Procedures
- Evaluation
- Reference on which the lesson plan starter is based

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## How Does This Apply at the Student Level?

- Provides teachers information about secondary transition evidence-based practices for teaching students with disabilities
- Can be used to:
  - Support IEP goals and objectives
  - Support student skill development
  - Identify transition services

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Jamarreo is a 19 year old student identified with emotional and behavioral disabilities. Jamarreo's interpersonal skills and work ethic are strengths for him. He exhibits strengths in the area of mechanical work. Career assessments indicate that he is likely to be a dedicated employee.

### ❖ Post-school Goal

- Upon graduation from high school, Jamarreo will work part-time as a shop helper in an auto body shop

### ❖ Annual IEP Goal:

- Given direct instruction for completing a job application, guided practice, and personal information, Jamarreo will complete an application with 100% accuracy by the end of the 1<sup>st</sup> school semester.

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NSTTAC's Evidence-Based Practices			
Student Development			
Teaching functional life skills	Teaching personal health skills	Teaching banking skills	Teaching purchasing skills
Teaching restaurant purchasing skills	Teaching job specific employment skills	Teaching self-management for life skills	Teaching completing a job application
Teaching employment skills using CAI	Teaching purchasing using the "one more than" strategy	Teaching self-management for employment	Teaching job-related social communication skills
Teaching grocery shopping skills	Teaching life skills using CAI	Teaching self-advocacy skills	Teaching cooking & food prep skills
Teaching home maintenance	Teaching life skills using CBI	Teaching functional reading skills	Teaching employment skills using CBI
Teaching leisure skills	Teaching self-care skills	Teaching functional math skills	Teaching self-determination skills
Teaching personal health skills	Teaching safety skills	Social skills training	

### What You Will Find at [www.nsttac.org](http://www.nsttac.org) or [www.ndpc-sd.org](http://www.ndpc-sd.org) for Jamarreo

1. "Teaching Completing a Job Application" is an evidence-based practice so you will find a Practice Description
2. In the Practice Description, you will find a link to a Lesson Plan Starters including:
  - To teach completing a job application, using the S.E.L.E.C.T. strategy
3. Problem Solving sessions
4. Academic Support

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### The NSTTAC Predictor Implementation Self-Assessment

- Intended to provide a framework
- Consider the descriptions and possible examples
- Degree of Implementation and the Evidence of Implementation Scales to guide decisions

### What Can We Consider?

- Our data tell us...
- District-wide/school-wide priorities?
- Transition Services?
- Annual Goals for instruction?

- Young women with intellectual disabilities are not earning wages/ working the hours we'd like to see
- ❖ What occupational or vocational coursework are the students with intellectual disabilities completing?
- ❖ What skills are taught?
  - Occupational courses included in course of study
  - Community-based work experiences included as transition services
  - Mastery of a specific job skill as an annual goal

- Hispanic males with learning disabilities are employed at lower rates than their African American and Caucasian peers
- ❖ What paid work experiences does this population have while in high school?
- ❖ How engaged are families?
  - Educate families about transition planning
  - Provide specific services (e.g., job clubs for interview, job seeking skills) [beyond graduation]

- Students across disability categories are not enrolling in postsecondary education from high school as they are from another high school
- ❖ What's different/ the same between the school populations?
- ❖ What's different/ the same between the school programs?
- ❖ What's different/ the same between the school resources?
- Engage students meaningfully in the transition planning process (e.g., interpretation of assessment results, career and training plans, linkages with outside agencies)
- Provide academic supports to ensure success in rigorous coursework

## What are the Challenges?

- How do we fit this in – scheduling?
- How do “individualize” on such a large scale?
- ?
- ?
- ?

## What Solutions May Exist?

### Creating Systems, Programs, Curricula that Include Effective Transition/ School Completion Strategies

- Analyze data to determine strengths (readiness) and needs (priorities)
- Select effective interventions
- Collect data to determine impact (student level, school level, district level)

### Creating Systems, Programs, Curricula that Include Effective Transition/ School Completion Strategies

- Engage students and families in identifying meaningful postsecondary goals
- Help families and students see the connection (relevance) of completing their education to postsecondary goals
- Implement courses of study (rigorous), transition services, and annual goals that support the postsecondary goals

## National Resources

National Post-School Outcomes Center  
[www.psocenter.org](http://www.psocenter.org)



National Secondary Transition Technical Assistance Center  
[www.nsttac.org](http://www.nsttac.org)



National Dropout Prevention Center for Students with Disabilities  
[www.ndpc-sd.org](http://www.ndpc-sd.org)

